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The American home: production cost, availability, selling price, and the implications to our economy

John C. Roach

What is the relationship between the number of homes available in a particular market and the U.S. economy concerning home prices, individual household wealth, and the concentration of people across different markets? Authors Edward Glaeser and Joseph Gyourko examine this very question in a recent working paper, "The economic implications of housing supply" (National Bureau of Economic Research, working paper no. 23833, September 2017). If the total production cost to build a home is close to its actual sale price, then the housing market is efficiently making homes available to buyers. When home prices exceed the cost of production and housing prices are too expensive for households regardless of household income level for that particular area, the housing market is not functioning as it should.

Historically in the United States, housing development coincided with the local economy's growth. Into the 1960s, regulation on new construction was light throughout the country. Coastal California and New York City, in particular, experienced high economic growth and significant increases in home construction during this period. As housing regulations became tougher between the 1960s and the 1990s, construction slowed in these high-demand areas. In Manhattan alone, 13,000 new housing units were allowed to be built in the year 1960. But throughout the decade of the 1990s, only 21,000 new housing units were permitted in Manhattan. The San Francisco Bay Area, which enjoys high economic productivity led by the technology sector, also has extensive restrictions on building and land use. This has led to housing prices that are among the most expensive in the United States.

To determine how different markets are functioning, the authors compare price (P) to minimum profitable production cost (MPPC). In areas where regulation on building is light, such as Atlanta where the growing economy matches the increasing population, the ratio of available housing to demand is relatively close. Home prices in this area remain close to production costs, yielding a P/MPPC of close to 1.0. Hence, home prices are reasonable for many prospective buyers. In highly regulated areas with booming economies, such as San Francisco, housing supply is at a minimum, resulting in home prices that are substantially above production costs; the resultant P/MPPC in such areas is well above 1.0. In housing markets where there is relatively low demand for housing, like Detroit, existing homes tend to be more durable because there is little demand for new construction. Such markets have P/MPPC ratios of 0.7 or less, resulting in lower prices for prospective buyers.

Limited housing supplies have benefitted the homeowners who purchased their homes before building regulations tightened and land values increased significantly. The authors illustrate this point by using data from the Federal Reserve's *Survey of Consumer Finances* to create a table showing the 30-year change (from 1983 to 2013) in housing net worth for six different age groups—the youngest being 18–24 and the eldest being 65–74. The sample did not report specific geographic location, focusing only on the change in home equity. The data showed that only



the richest cohort among the oldest age groups saw a spike in home wealth. The two eldest groups 55-64 and 65-74, experienced considerable housing wealth increases at the 90th percentile and above, and the 65–74 age group experienced the sharpest wealth increase. The authors concluded that these results were attributable to the fact that many in the eldest groups were likely to have become homeowners before the increase in housing prices that occurred starting in the 1990s.

In conclusion, the authors note that when you have a highly regulated area with limited housing supply, you'll likely have smaller population growth and higher home prices. The majority of Americans have experienced limited growth in housing wealth. However, some older Americans, especially those in the coveted coastal areas who purchased their homes more than 30 years ago, have experienced considerable growth in home equity. Regions that have experienced significant economic success and have a highly regulated housing market generally have higher prices for the available homes. The authors suggest heavy regulation of these productive regions may have steered the labor force to more affordable areas, resulting in the reduction of America's overall economic output.